Environmental Assessment

for the

Blair Lakes Bombing Range Facility Improvements

354th Fighter Wing
Eielson Air Force Base
March 2006

Report Documentation Page

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FINDING OF NO SIGNIFICANT IMPACT
and
FINDING OF NO PRACTICABLE ALTERNATIVE
for
Construction of Facility Improvements at Blair Lakes Bombing Range

Introduction

The Air Force started development of the Blair Lakes Range (Blair Lakes) in the early 1970s and has since that time used the range as an important training facility for strafing and bombing practice. In early 1993, the Air Force implemented a 25-year plan to improve the infrastructure at the range. The improvements have resulted in improved range operations and have also lessened the impact of range maintenance activities to wetlands. Most range activities can now be confined to the existing all-season roads and target pads. However, as new training requirements are identified, additions to the facilities at Blair Lakes are needed to ensure that Eielson's pilots are receiving the best training possible.

Proposed Action

The proposed action would result in modifications to existing facilities and construction of new ones at Blair Lakes. The existing ricochet pit wall would be expanded, a new electrical transformer pad would be built, an existing aircraft turnaround enlarged, a new helicopter pad constructed, additional utility lines installed, and 22.6 acres of low value black spruce wetlands mechanically cleared (hydro-axed).

No Action Alternative

The no action alternative would result in no additional work being undertaken at Blair Lakes.

Environmental Impacts of the Proposed Action

Wetlands

The proposed action will result in the filling of 4.2 acres of black spruce wetlands with gravel. An additional 22.6 acres of low value black spruce wetlands will be mechanically cleared of trees and shrubs. These wetlands provide habitat for some species of birds and small mammals. However, the overall quality of black spruce wetlands is low and has been further diminished as the result of previously established range facilities. Once cleared, shrubs will grow back that will provide nesting habitat for some bird species and browse for moose.

Fish and Wildlife

None of the activities associated with the proposed action will likely result in impacts to fishery resources. Some wildlife may be displaced to adjacent areas by the additional filling of 4.2 acres of wetlands with gravel. The overall impact to fish and wildlife from the proposed action is expected to be minor.

Historical or Cultural Resources

Archeological sites have been identified in the 63,100-acre Blair Lakes Range. None of these sites would be impacted by range activities. In the event that historic or cultural sites are discovered during range construction or routine operation and the activities pose a threat to the site, activities will be halted and a professional archeologist will be brought in to evaluate the find.

Mitigation

Standard best management practices have been incorporated into the project design to mitigate impacts to the environment. These include using silt fences to prevent siltation in wetland areas and revegetating disturbed soils to prevent erosion. No special conditions (mitigation) were required by any federal or state agency that reviewed and/or commented on the Army Corps of Engineers wetlands permit for this project.

Public Comment

No public comments were received as a result of the public noticing of the EA/FONSI or the U.S. Army Corps of Engineers wetlands permit for this project.

Finding Of No Practicable Alternative: Blair Lakes has been used by the Air Force for bombing and strafing practice for more than 20 years. It is a valuable training facility that will be used for the foreseeable future. Any new range development is likely to impact wetlands because, except for the areas developed by importing fill, the range is entirely wetlands. The proposed action will provide critical training opportunities that are currently unavailable at Alaska range facilities. Taking all the environmental, economic, safety, and other pertinent factors into account, pursuant to Executive Order 11990, and the authority vested in me by the Secretary of the Air Force Order 791.1, I find that there is no practicable alternative to the filling of 4.2 acres of wetlands and that the Proposed Action includes all practical measures to minimize harm to the environment. This decision has been made after taking into account all submitted information and considering a full range of alternatives that are within the legal authority of the Air Force, and which would meet the project requirements.

Finding Of No Significant Impact: Based on the environmental assessment (EA) conducted in accordance with the requirements of the National Environmental Policy Act, the Council on Environmental Quality, and Air Force Instructions, I conclude that the construction of new facilities at Blair Lakes will not result in significant impacts to the environment and that preparation of an environmental impact statement is not warranted.

WILLIAM M. GORSON,Colonel, USAF
Director, Installations and Mission Support

13 Jun 06
Date

Table of Contents

Upgrade Facilities at the Blair Lakes Bombing Range Environmental Assessment

1.0 Purpose and Need for the Proposed Action

Section 1.0 provides a description of the purpose and need for the proposed action.

1.1 Background

1.1.1 Eielson Air Force Base (Eielson) is proposing to construct new facilities and modify existing ones at their Blair Lakes Bombing Range (Blair Lakes) in the Fort Wainwright Training Area, Alaska. The existing ricochet pit wall would be expanded, a new electrical transformer pad would be built, an existing aircraft turnaround enlarged, a new helicopter pad constructed, and additional utility lines would be installed. This proposed work would result in the loss of 4.2 acres of black spruce wetlands. Also, to provide aircraft clear zones for new and existing facilities, 22.6 acres of low value black spruce will be mechanically cleared.

1.1.2 Since December 1990, the number of military aircraft assigned to Alaska has increased approximately 33 percent. In addition, aircraft from other bases are frequently deployed to Alaska to participate in joint/combined training and Major Flying Exercises (MFE). These aircraft may include all types currently in the DoD inventory, as well as similar allied aircraft. The operational requirements for these aircraft include air-to-ground weapons ranges and use of ground-based threat radar and weapon system simulators. Blair Lakes Bombing Range (Blair Lakes) provides the type of training required by these aircraft. Maintaining existing Blair Lakes range facilities, as well as adding new and improved facilities as mission requirements change, is critical to Eielson's and the Air Force's mission to train the world's best air craft.

1.1.3 In 1969, the Air Force conducted an environmental and engineering study to determine the appropriate location for a bombing range in Alaska. In 1970, the first facilities were built at Blair Lakes. In 1993, Eielson Air Force Base (Eielson) proposed major upgrades to the Blair Lakes bombing facilities. This included a 25-year plan to reduce wetland, stream, and riparian degradation; to restore natural drainage patterns; and to increase the efficiency and serviceability of Blair Lakes. This was to be accomplished by upgrading 6 miles of target maintenance roads, constructing 0.1 miles of new road, constructing a bridge and installing culverts, upgrading four 320-foot diameter target pads, and constructing a 3,500-foot airstrip that would also function as a road. Two gravel pits were to be developed to provide necessary construction material. The construction of elevated roads and target pads and installation of drainage structures were needed to protect sensitive wetlands from traffic and to reestablish and safeguard natural drainage patterns that had been damaged by routine

equipment movement along the existing unimproved roads. Depressions made by traffic had created areas for water to collect and alter natural drainage. Erosion and siltation had also occurred as a result of stream bank damage from maintenance vehicle traffic.

1.1.4 Upgrades proposed to Blair Lakes in 1993 were initiated in 1994 and have continued during the past eleven construction seasons. The new gravel borrow pit was opened, airstrip construction begun, and various other improvements made. Much of the work addressed in the 1993 EA (*Road, Target, and Airstrip Construction At Blair Lakes Range, 25-Year Plan),* was originally intended to mitigate impacts to wetland resources that either had previously occurred, or could occur in the future by operation of Blair Lakes**.**

1.1.5 In 2001, because several aspects of the originally proposed work/designs were found to be inadequate or in need of redesign, modifications to the originally proposed work were presented. A wetlands permit was obtained and an Environmental Assessment (EA) was written that addressed the proposed work.

1.1.6 In 2003 Eielson obtained military construction (MILCON) program funds to relocate the Blair Lakes Range Maintenance Complex. Another EA was written to address the environmental impacts of this proposal. The project had been requested to accomplish several urgently needed objectives. They included the following:

- Move Range Maintenance Complex away from the strafing pits.
- Increase billeting at the complex from 12 to 20 personnel.
- Replace, separate, and enlarge range maintenance and vehicle maintenance facilities. These facilities are over 30 years old and in need of major renovation.
- Increase and move bulk fuel storage capacity.
- Decommission and demolish unused structures.
- Construct a 100-foot by 100-foot heliport adjacent to road north of the new complex.

This construction was initiated in 2003 and was completed in late 2004.

1.1.7 To meet changing range requirements and improve existing range facilities, several additional minor improvements have been proposed. These modifications would improve existing target systems as well as provide new target configurations as part of a continuing effort to have the best aircraft training facilities available on Eielson's ranges. These modifications would include:

- Expand the existing ricochet pit wall an additional 32 feet.
- Construct a 52-foot by 52-foot transformer pad.

- Expand an existing aircraft turnaround pad from 80 feet by 75 feet to 150 feet by 100 feet.

- Construct a 675-foot-long by 51.5-foot-wide road with a 132-foot-square helipad at its end.
- Clear 10 acres of trees and shrubs around the helipad for an aircraft clear zone.
- Clear 12.6 acres of trees and shrubs for a utility line right-of-way.
- Place all cleared trees and shrubs in an existing 2.5-acre pond. Filling of pond will reduce bird air strike hazards that currently exist at Blair Lakes.

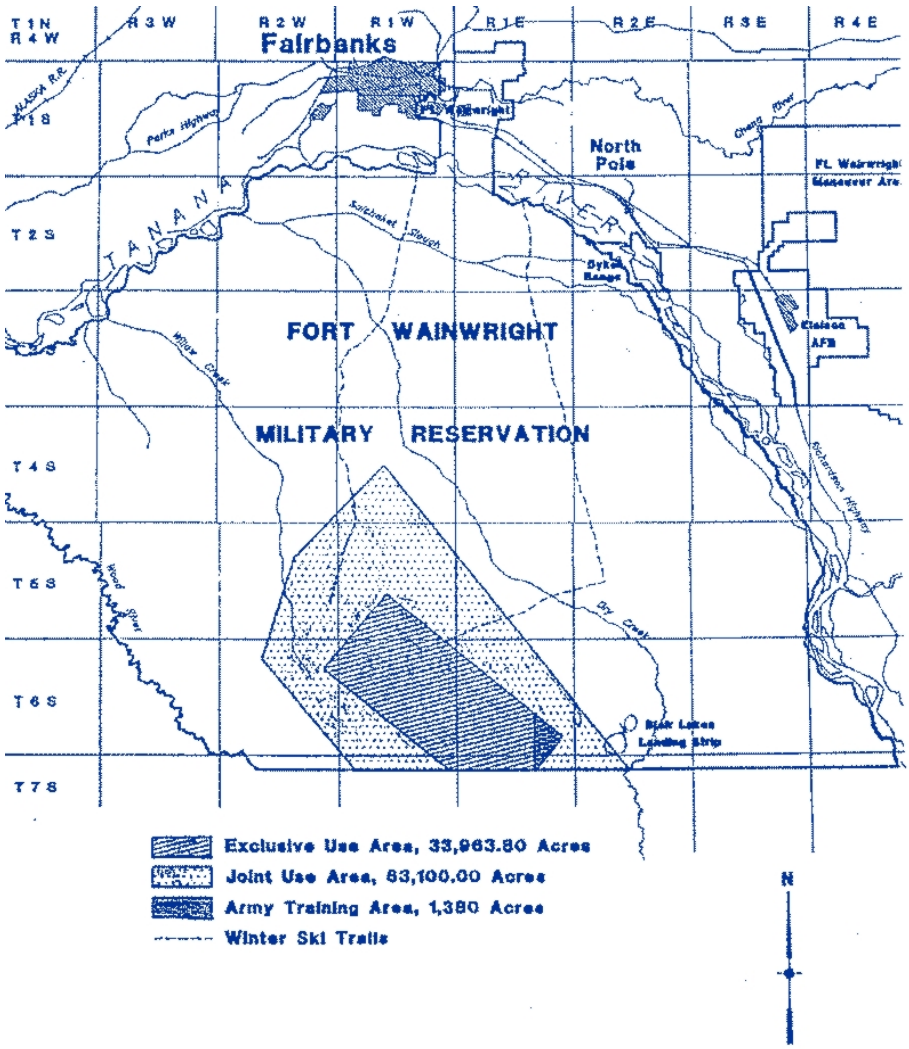

Figure 1-1 – Location Blair Lakes Range

1.2 Location of the Proposed Action

1.2.1 The existing Blair Lakes range is a 63,100-acre tract that is part of the 642,215-acre U.S. Army, Ft. Wainwright, Tanana Flats Training Area. The Air

Force's Land Use Permit provides them exclusive use of a 33,963-acre portion of the tract, designated R-2211, and joint use of the remaining 29,137. The range is located 26 miles southwest of Eielson and 32 miles due south of Fairbanks.

1.2.2 The Ft. Wainwright Range was first activated in 1941 by Executive Order 8847, signed by Franklin D. Roosevelt, and amended by Public Land Order 2676. Since then the Army has conducted tank maneuvers, fired artillery, and trained ground forces on this range. The Air Force has used their portion of the range mainly for bombing and strafing practice, and on occasion, live ordnance detonation.

1.3 Scope and Organization of the Environmental Assessment

1.3.1 The development of alternatives to the Proposed Action for this project presents a rather unique circumstance from the standpoint of trying to provide options for a decision maker and to meet the intent of the National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) guidelines. The decision to locate a facility at Blair Lakes has been addressed in four different EAs. The initial EA's FONSI came to the conclusion that the best location for the facility would be at Blair Lakes. During each of the four subsequent NEPA processes, the alternative selected by the decision maker was to continue operating the facility at its present location.

1.3.2 Since the decision to locate and operate the Blair Lakes Range at its current location has been addressed in at least four other NEPA documents, it was decided during the scoping meeting discussions that only a proposed action and a no action alternative would be considered for the current project. In the past, there had been alternatives addressed that would have relocated Blair Lakes operations to alternate locations, some of which were wetland areas and others that were upland. However, no other feasible alternatives were available that could be considered for the purpose and need stated in Section 1.1 of this document.

1.4 Other NEPA Documents that Influence this EA

As stated previously, there have been several EIS's and EA's that have addressed issues relating to the construction and operation of Blair Lakes Range. Most, if not all, issues that were listed during the scoping process for the currently proposed work at Blair Lakes Range have been identified and thoroughly addressed in one or more of the NEPA documents listed below. For this reason, the analysis of environmental impacts for the currently proposed work will reference and tier to these documents.

1.4.1 *Final Environmental Statement on Air Force Blair Lakes Range Operations, 1972.* This document was intended to comply with NEPA when the Blair Lakes project was first proposed in 1969; however, the document was not distributed to

interested agencies and the public until December of 1972, after which the initial range facility was constructed. In addition, there was no signed decision document (FONSI for an EA, Record of Decision for an EIS) prepared, and without this, the NEPA requirements would not be met. Based upon this lack of complete NEPA documentation, it was decided to write an EA that fully addresses all activities that have occurred at Blair Lakes so that current and future decision requirements can be based on a complete assessment of facts and issues.

1.4.2 *Ft Wainwright, Resource Management Plan and Final EIS, U.S.D.I., Bureau of Land Management, 1989.* This document provides a summary of alternate resource management plans for the Ft. Wainwright, Yukon Maneuver Area. Similar management approaches are used for these lands as are used for other BLM/Army managed lands such as the Blair Lakes area.

1.4.3 *Ft Greely, Proposed Resource Management Plan and Final EIS, U.S.D.I., Bureau of Land Management, 1989.* This document provides a series of options for resource management of the Ft. Greely Maneuver Area. Part of this area is the proposed location, in Alternative 1 of this EA, for the establishment of a bombing range similar to the one that presently exists at Blair Lakes Range. Issues addressed, as part of this management plan would also relate, in some respects, to those issues that must be considered if a new bombing range were to be located in the Ft. Greely Maneuver area.

1.4.4 *Environmental Assessment of the Proposed Conversion to F-16C/D Squadron, Eielson AFB, AK, 1991.* In 1991, this EA was written to assess the impacts of converting A-10 aircraft, then currently assigned to Eielson AFB, to F-16 C/D aircraft. Issues associated with this conversion were addressed including airspace, socioeconomic impacts, aircraft noise, and military manning. The decision to do the conversion was based, in part, on having access to a bombing range similar to Blair Lakes Range.

1.4.5 *Environmental Assessment of the Upgrade of Target Arrays on Ft. Wainright and Ft Greely, Alaska, 11th Air Force, 1992.* This EA assesses the environmental consequences associated with establishing new target arrays and a mock airfield on the Oklahoma Impact Area at Ft. Greely.

1.4.6 *Yukon Measurement and Debriefing System, Environmental Assessment, 11th Air Force, 1993.* To upgrade training opportunities for the 354th Fighter Wing at Eielson AFB, an Air Combat Maneuvering Instrumentation (ACMI) system was proposed for the Ft. Wainwright and Yukon Ranges. This system is also intended to support large force exercises and joint training events for DoD combat aircrews. Portions of this system are located immediately adjacent to the Blair Lakes facility (Site WR-3). Aspects of the process of locating this system at this site provides some baseline assessment for the operation of Blair Lakes Range.

1.4.7 *Eielson Air Force Base Operable Unit 1-Declaration of the Record of Decision, 1995.* Blair Lakes in the vicinity of the operations center, was identified as a contaminated site during investigative studies conducted in the 1980's as part of the Environmental Restoration Program (ERP). Five source areas (SS50-SS53 and DP54) were delineated and addressed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). As part of this program extensive investigative studies were conducted, remedial action design was proposed, and remedial actions were initiated. This document provides some of the most in-depth assessment of impacts attributed to operation of Blair Lakes Range that have been documented. As part of the CERCLA process a wide variety of federal, state, local and public input and review was solicited during the development of this document.

1.4.8 *Alaska Military Operations Areas-Environmental Impact Statement, 11th Air Force, 1995.* This EIS was prepared to address the environmental impacts of restructuring the Air Force Special Use Airspace in Alaska. The document assesses several issues pertinent to the operation of Blair Lakes Range, including airspace management, biological resources, recreational resources, subsistence, land use, air quality, and noise as they relate to operation of military aircraft.

1.4.9 *Road, Target Pad, and Airstrip Construction at Blair Lakes Range (25-Year Plan), 1993.* This EA addressed a wide array of improvements that were needed to improve operational aspects of the range, as well as repair previously impacted wetlands and avoid future impacts that could occur if actions were not taken. The proposed work was part of a 25-year plan to upgrade Blair Lakes Range.

1.4.10 *Renewal of Blair Lakes Bombing and Gunnery Range Permit, Ft. Wainwright Maneuver Area, Alaska, 1996.* This detailed assessment was written to address the need for a renewal of the Army Land Use Permit required for operation of the facility.

1.4.11 *Blair Lakes Range Upgrade, 1999.* In early 1993, the Air Force implemented a 25-year plan to improve the infrastructure at the range. The improvements have resulted in improved range operations and have also lessened the impact of range maintenance activities to the wetlands. Most range activities can now be confined to the all-season roads and target pads. This EA was done to address work needed to modify or improve previously proposed work.

1.4.12 *Construction of a Blair Lakes Range Maintenance Facility, 2004.* This EA addressed the construction of a new maintenance facility at Blair Lakes.

1.5 Decision to be Made

1.5.1 As required by Air Force Instruction 32-7061, an *Environmental Impact Analysis Process* (EIAP) must be completed to determine what are the environmental consequences of the proposed facility modifications at Blair Lakes. The completion of this EA is intended to satisfy these requirements. The Proposed Action and the No Action Alternative will be addressed in detail in Chapter 2.0 of this document. A description of the resources involved with each alternative is provided in Chapter 3.0, and the impacts that could result from each one are discussed in Chapter 4.0.

1.5.2 The EA, a draft FONSI (if applicable), and all other appropriate planning documents will be provided to the Pacific Air Forces (PACAF) Installation and Mission Support Commander, the decision maker, for review and consideration. If, based on a review by the decision maker of all pertinent information, a FONSI is proposed, a notice of intent (NOI) will be published in accordance with 40 CFR 1506.6. All interested parties will have 30 days to comment on the decision to the Air Force. If, at the end of the 30-day public comment period, no substantive comments are received, the decision maker will sign the FONSI.

1.5.3 Two Executive Orders (EOs), 11988 (Floodplain Management) and 11990 (Protection of Wetlands), require the heads of federal agencies to find that there is no practicable alternative before the agency takes certain actions impacting wetlands or floodplains. To address this requirement, the Secretary of the Air Force's designated agent, HQ PACAF/A7 will sign a document that addresses the issues of wetlands and floodplains that may be associated with actions the Air Force proposes to take. This document, known as a Finding Of No Practicable Alternative (FONPA) will state which alternative, the Proposed Action or the No Action Alternative will be selected as the appropriate course of action. The FONPA will be combined with the FONSI into one document. It will contain documentation that all practicable measures to minimize harm to wetlands and/or floodplains have been taken, and that all appropriate mitigation will be incorporated into the project design or otherwise authorized.

1.6 Project Scoping/Significant Issues

This section provides a summary of issues identified during the scoping process.

1.6.1 A scoping meeting for this EA was held on October 19, 2005 at the Eielson AFB Civil Engineer Squadron offices and was attended by personnel from Eielson Range Maintenance, Eielson Environmental Flight personnel, and Alaska Caledonia Environmental Services. The Alaska Department of Fish and Game (ADF&G) and U.S. Fish and Wildlife Service declined invitations to the meeting.

1.6.2 The following summarizes issues that were identified by various Eielson personnel during the scoping process relating to road upgrades and construction:

- Bird air strike hazards
- Disturbance of wetland vegetation
- Erosion and siltation in the vicinity of streams
- Alteration of surface drainage patterns

1.6.3 It was noted by many attending the scoping meeting that these issues were similar, if not the same, as those raised for previous work proposed at Blair Lakes Range. These issues and concerns have been addressed in previously written environmental assessments and the time since implementation of the previous projects has been long enough that actual circumstances can be observed and impacts recorded. This EA will rely on referencing these circumstances where applicable.

1.7 Federal and State Permits or Licenses Needed for Project Implementation. A U.S. Army Corps of Engineers 404 wetlands permit is needed for this project.

2.0 Description of the Proposed Action and Alternatives

Section 2.0 provides a description of the Proposed Action and the No Action Alternative.

2.1 Proposed Action – Construct/modify facilities

2.1.1 The proposed action would result in the following modifications to facilities at Blair Lakes:

- Place approximately 2,370 cubic yards of sand fill in wetlands to expand the existing ricochet pit by 32 feet.
- Place 3,473 cubic yards of gravel in wetlands to construct a 52-foot by 52-foot transformer pad, expand an existing aircraft turnaround pad, and construct a 132-foot-square helipad with a 675-foot access road.
- Mechanically clear trees and shrubs to provide a 10-acre clear zone around the helipad and to create a utility right-of-way for future utility installation.
- Fill an existing 2.5-acre pond with 78,578 cubic yards of trees and organic material generated from the mechanical clearing. Filling the pond is part of an on-going program to reduce bird air strike hazards at Blair Lakes
- These improvements will result in the loss of 4.2 acres of black spruce wetlands.

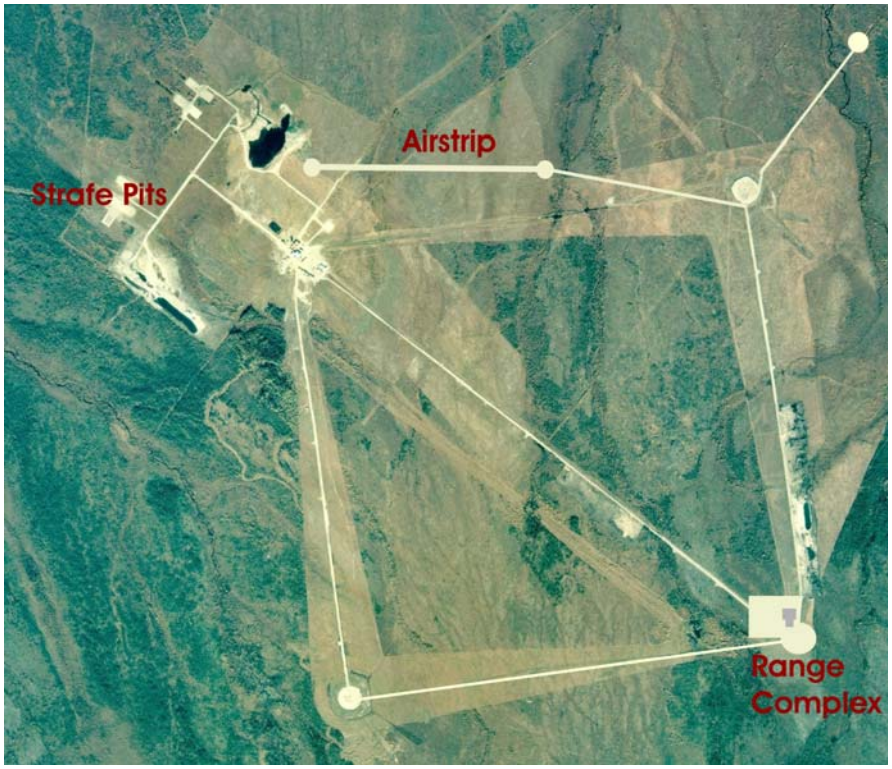

Figure 2-1 – Existing Facilities at Blair Lakes

2.1.2 All gravel and sand materials required for facility construction will be extracted from the gravel borrow pit located at Blair Lakes.

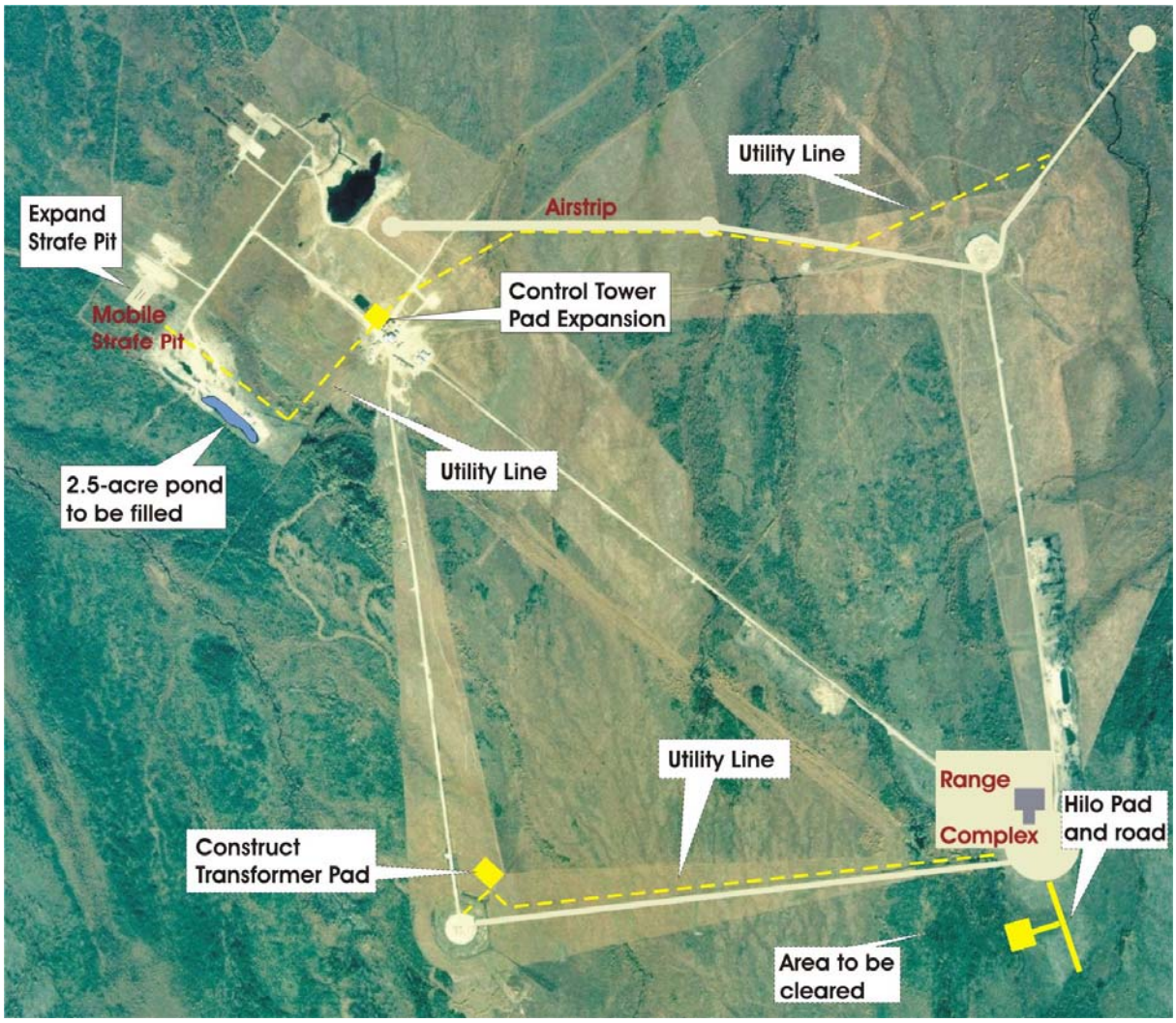

Figure 3 - Alternative 1 Project Layout

2.2 No Action Alternative

Under the no action alternative no new construction would occur at Blair Lakes.

3.0 Affected Environment

Section 3.0 presents a description of the physical, biological, and cultural resources that currently exist in the areas of potential impact as delineated by the Blair Lakes Range.

3.1 Physical Resources

The Blair Lakes Range (Exclusive Use Area), is a rectangular shaped tract, 33,964 acres in size. It is located in the Tanana Flats region of Interior Alaska. It is situated approximately 50 miles north of the Alaska Range and south and west of the course of the Tanana River. The Wood River lies just west of the Range's western boundary. Topographically, the Blair Lakes Range is a gently rolling glacial outwash that slopes slightly to the northwest. The range itself has little topographic relief. Occasional hills or buttes occur in the vicinity with elevations of 1,250 to 1,400 feet. The elevation of most of the range's land, however, is between 500 and 650 feet.

3.1.1 Geology/Soils

3.1.1.1 The geology and soils of the Blair Lakes Range is relatively uniform. In areas undisturbed by development activities, the land can be characterized as having a top layer of 6 to 12 inches of fibrous peat underlain by 2.5 to 3.0 meters of variably thick layers of fine grained silt, sandy silt, silty clay, and gravely sandy silt. These various grain types occur as lenses and layers, 0.5 to 2.0 meters thick. Gravel layers up to 1-meter thick may also be present, especially near the surface. Most of the developed portion of the facility is built up on gravel extracted from the site. Due to the fact that the Blair Lakes Range Facility is currently upgrading existing roads, target pads, and stream crossings, and constructing new roads, and a gravel pit, the exact number of acres covered by gravel fill is changing on a continuing basis.

3.1.1.2 Detailed soil profiles are not available for the Blair Lakes areas except in selected areas where investigative studies performed by the CERCLA program was required. Profiles of these surveys are provided in the *Remedial Investigation Report, Environmental Restoration Program OU1.*

3.1.1.3 Permafrost is a dominant physical feature of soils in the Blair Lakes Range. It generally varies in undisturbed portions of the range from 2.9 meters to 60 meters in depth. Permafrost depth studies using an electromagnetic sounding device (FDEM), indicated that the depth to the top of the permafrost varied greatly in the developed portion of the site and is closest to the surface on the east side of the building complex. Variable permafrost depth may be the result of several factors including variability in ground cover (vegetation in summer, snow in winter), sediment grain size distribution, and artificial heat sources that create thaw bulbs associated with facility structures

such as the septic pond. The permafrost extends to a depth of up to 100 feet in some areas.

3.1.2 Water Resources

3.1.2.1 *Surface Water*: Surface water exists in the form of a network of small, low gradient streams that have seasonal variations in flow and generally freeze up in the fall. This network of streams mainly feed Clear and Willow Creeks which flow to the northwest to join the Tanana River. Occasionally, where the permafrost is close enough to the surface and water table perched high enough, small ponds will form which may be seasonally persistent. The only lakes of any size are the Blair Lakes that are just off of the impact area on its southeast corner.

3.1.2.2 *Groundwater:* Due to the presence of permafrost in the area, perched water table conditions exist in many portions of the range, contributing to seasonally persistent moist or saturated soil conditions and classifying them technically as wetlands. Unconfined aquifer conditions exist wherever saturated alluvial deposits occur above the permafrost layer. Groundwater movement is generally in a north/northwest direction, and permafrost appears to act as a confining layer to the deeper alluvial aquifer that is the source of the facility's water supply well.

3.1.2.3 *Wetlands and Floodplains*: Wetlands comprise 99.7 percent of Blair Lakes. The unmaintained portion of the range is mostly black spruce wetlands. The dominant species is black spruce, and is typically 15 to 30 feet tall and 4 to 5 inches in diameter. Paper birch and alder are abundant along watercourses. Three thousand acres maintained by mowing or hydro-axing. Brush control keeps this area in an early stage of plant succession. About 1.4 percent of the Blair Lakes Range is within the 100-year floodplain. There are no 100-year floodplains in the maintained portion of the range.

3.1.3 Noise

3.1.3.1 Noise is defined as a small-scale fluctuation of air pressure that typically follows a repetitive pattern. Noise can cause behavioral patterns in both humans and wildlife. Sound levels are measured in decibels (dBA). The threshold of human hearing is 0 dBA. Typical dBA of various noise sources are as follows:

Threshold of Hearing	0 dBA
Background Noise for Wilderness Areas	30-50 dBA
Level above which hearing or behavior may be affected	65 dBA
Jet Takeoff	120 dBA

3.1.3.2 Aircraft generate by far the most noise at Blair Lakes Range. Noise levels associated with aircraft during flying hours can exceed 80-dBA in the vicinity of the range facility. A 65-dBA level or higher is not recommended for housing areas by EPA standards (Noise Effects Handbook, US EPA, 1981). Construction noise is potentially another source of noise, but it is not considered to be a concern due to its temporary nature and relatively low dBA level. When aircraft are not flying in the vicinity of the Blair Lakes Range, background decibel levels are well below 65-dBA.

3.2 Biological Resources

3.2.1 Vegetation

The 33,963-acre Blair Lakes Range Exclusive use area exhibits considerable variation in plant community types. This can be attributed to the fact that surface water and its associated drainage patterns provide a wide range of soil moisture conditions. The poorly drained areas are dominated by an overstory of black spruce and tamarack. Understory vegetation includes Labrador tea, resin birch, dwarf arctic birch, and willow. Large portions of these areas (more than 15,000 acres) are in a post-fire successional plant community, resulting from at least two fires occurring in the last 15 years. Interspersing these black spruce forests are wet meadows of herbaceous graminoid communities, dominated by water sedge, scattered green alder, resin birch, and willow. These areas often contain seasonally persistent water bodies. Along stream courses (Willow and Dry Creek, and tributaries) soils are slightly better drained, overstories of mature paper birch mixed with larger black spruce dominate. Understories in these areas include willow, green alder, water sedge, and blue joint grass. To the immediate east of the southeast corner of the range, a series of hills rise up 500 feet above the valley floor. In this area of well-drained soils, broadleaf forests of paper birch and quaking aspen occur. The other dominant vegetative feature of the Blair Lakes is the areas associated with the range targets, an area approximately 3,000 acres in size that has been hydro-axed. This area is maintained in an early successional stage of mostly black spruce, labrador tea, resin birch, and willow (10 to 40 inches tall). This type of vegetation provides nesting for some bird species and excellent browse for moose. The hydro-axing is required as part of range operation.

3.2.2 Wildlife

3.2.2.1 Detailed wildlife inventories of the Blair Lakes Range have not been conducted. What information is provided is the result of anecdotal observations made on an irregular basis by Eielson AFB Range and Natural Resources personnel.

3.2.2.2 Primary wildlife species that utilize the non hydro-axed black spruce wetlands include black bear, red squirrel, marten, spruce grouse, and wolves.

Moose will use the areas, but usually in association with movements between more preferred habitat. The hydro-axed portion of the range is preferred by moose and also used by snowshoe hare and fox. Although caribou do not typically use the area, established adjoining caribou ranges could be extended into the Blair Lakes Range if conditions changed in the existing ranges.

3.2.2.3 Because Blair Lakes is largely wetlands and contains seasonally persistent water bodies, the habitat is attractive to birds, particularly waterfowl. Bird surveys were conducted in 1992 and 1993 as part of the Bird Aircraft Strike Hazard (BASH) monitoring at Blair Lakes. The habitats observed for recording bird numbers were, for the most part, man-made structures (gravel pit, sewage lagoon). It was felt that birds observed in the area is indicative of what species likely use naturally occurring habitat adjacent to the facility such as ponds and sloughs associated with wet meadows. The surveys were conducted by counting use-days for both individual species (Canada geese, sandhill crane) and collective species (ducks, gulls).

3.2.3 Fishery Resources

Surveys of fish populations in streams associated with the Exclusive Use portion of Blair Lakes have not been done. In 1975, when wetland permits were requested for construction of facilities at Blair Lakes, ADF&G stated that they felt, that Clear Creek, a stream that flows through the area, may have a resident grayling population. For this reason they required the proposed crossing of this stream be by bridge rather than a culvert. It is also possible that Northern Pike may use the stream during summer months.

3.2.4 Endangered Species

No threatened or endangered animal species, as designated by the U.S. Fish and Wildlife Service, are known to occur in the proposed action area. This is based on the conclusion of an Eielson AFB contract study that addressed the potential for the presence of endangered species on base lands (Biological Survey, Final Report 1994). The American peregrine falcon, which was recently removed from the list of threatened species, is known to migrate through the area.

3.3 Cultural Resources

3.3.1 In 1984, as part of the development of a *Historic Preservation Plan (HPP)* for Army lands in the state of Alaska, the U.S. Army conducted a detailed inventory of all archeological and historic sites contained on their lands. Included in this survey was the Blair Lakes Range Exclusive Use Area, which had received an initial survey in 1973 as part of an Eielson AFB site evaluation for the original Blair Lakes Range construction project. Information collected during this investigation was revisited and incorporated into the Army *HPP.*

3.3.2 Blair Lakes Range has 18 documented archeological sites. All but one of these, however, is located outside of the Exclusive Use Area and not subject to disturbance by Air Force range activities. The one location that is within the facility boundary, is just inside the southeast perimeter, and is probably not subject to disturbance because of its proximity to the range facility. The remaining 17 are located in association with the three "Blair Lakes" that are to the east of the Exclusive Use Area. Six of these sites have been declared "eligible" for the *National Registry of Historic Places*. They are, for the most part, undisturbed multi-component prehistoric sites containing remains from such periods as Denali, Historic, late Prehistoric, Athabascan, and Northern Archaic. Responsibility for protection of all of the Blair Lakes sites belongs to the U.S. Army.

3.4 Recreational Resources

3.4.1 The Blair Lakes Range has been in operation for 25 years and during that time recreational use of the area has been restricted due to its exclusive use designation. Prior to 1973, ADF&G's estimated recreational use of the area was only light to moderate by moose hunters and trappers. There is a small landing strip just outside of the Exclusive Use Area that is located adjacent to one of the Blair Lakes. It does get use during both the summer and winter, providing some access to surrounding areas. During the winter, snow machines also occasionally use the unrestricted areas adjacent to the Exclusive Use Area.

3.4.2 Although surface use of the Blair Lakes Exclusive Use Area is totally restricted, airspace is not. Airspace is restricted during periods of scheduled training, and then only at certain altitudes. During non-training periods, airspace is not restricted.

3.5 Subsistence Resources

3.5.1 The Blair Lakes Range is located in the Ft. Wainwright Tanana Flats Training Area and is within the historic subsistence ranges of two lower Tanana bands of natives. These bands include the Chena and Salcha native groups. The Chena natives utilized northern portions of the Yukon Training Area within the Chena River drainage and the Salcha natives the areas associated with the Salcha River drainage. Blair Lakes is positioned in between these two regions and thus did not get heavy use by either group.

3.5.2 Since 1980, native and non-native subsistence uses on Federal public lands in Alaska, including the withdrawal lands, have been regulated by Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA). Under ANILCA, rights established through customary and traditional subsistence uses determines subsistence use of specific land. No requests under ANILCA have

been made for subsistence use of lands associated with the Blair Lakes Range. Thus it is felt that these lands do not represent preferred subsistence use land.

4.0 Environmental Consequences

Section 4.0 discusses the probable impacts for each alternative described in Section 2.0. This discussion will provide the scientific and analytic basis for comparison of the alternatives and will be presented in the sequence they were described in Section 3.0.

4.1 Physical Resources

4.1.1 Soils/Geology

4.1.1.1 Proposed Action

4.1.1.1.1 As described in Section 3.1.2.3 of this EA, permafrost is a dominant physical feature at Blair Lakes. Range activities have altered the depth of the permafrost, which has in turn impacted some land. Prior to the 1993 project to create all-season roads and target pads, much of the surface travel was on tundra trails and the target areas were cleared areas in the tundra. Summer activities disturbed the surface reducing the insulating properties of the organic mat. Some thermokarsting occurred along trails and target pads, evidenced by slumping of tundra and occasional ponding in summer. The work started in 1994 was, in large part, intended to address these impacts. Activities associated with the currently proposed modifications included in the proposed action would continue the establishment of permanent, all-weather roads and pads that will significantly reduce the occurrence of thermokarst related impacts.

4.1.1.1.2 One aspect of activities at Blair Lakes that has altered the geology and soils of a portion of the area that has been developed, is the removal of surface soils, the exposure of gravel lenses, and the subsequent mining of the gravel. The overburden is placed adjacent to the gravel pits and gravel is extracted for use as construction material for facility pads and roads. This process will continue until the 25-Year Plan for improvements at Blair Lakes is complete.

4.1.1.1.3 The proposed construction will result in the filling of 4.2 acres of black spruce scrub/shrub wetlands. In addition, the mechanized clearing of 22.6 acres of low value black spruce scrub/shrub wetlands will result in additional impacts. Approximately 84,691 cubic yards of gravel and sand will be placed in wetlands as part of this construction. As part of this process, existing soils will be covered by a 4-foot-layer of pit run gravel to create the pads and access roads. This gravel will be mined from the nearby gravel borrow pit. The installation of utility lines will be accomplished by trenching and backfilling in areas immediately adjacent to the toe of the roads that they, in most cases, follow.

4.1.1.2 No Action Alternative

The no action alternative would result in no additional impacts to soil beyond that which would result from activities authorized by previous wetlands permits and addressed in previous EAs (see **Section 1.4**).

4.1.2 Surface Water and Groundwater Resources

4.1.2.1 Proposed Action

4.1.2.1.1 Activities associated with the proposed action have some potential to impact surface water resources at the Blair Lakes Range. Certain past activities and operational practices at the range have resulted in significant alteration of natural drainage patterns. Ruts from vehicle traffic on the tundra and at stream crossings have caused ponding and altered surface water flow. One of the major reasons for developing the 25-Year Plan for Blair Lakes was to address these impacts. Ongoing work provided for in this plan will continue to address these impacts. The current work proposed in this EA will also be completed with designs and methods that ensure that surface and groundwater resources are not further impacted.

4.1.2.1.2 Activities anticipated as part of the proposed action require the use of large earth moving equipment. Operation of this type of equipment always has the potential for spills of petroleum products associated with fueling and maintenance. If routine best management practices are used, these types of impacts would be minimal. In addition, the range has on-site, spill cleanup capability in the event of an accident.

4.1.2.1.3 There is the likelihood of localized temporary increases in surface water turbidity and siltation as a result of the use of earth moving equipment to construct roads, facility pads, and extract gravel. These impacts will be localized and, to the extent possible, the use of construction best management practices (silt fences, cofferdams) should minimize these impacts.

4.1.2.1.4 Impacts to groundwater are not anticipated as a result of activities associated with the proposed action.

4.1.2.1.5 Work proposed for this phase of construction at Blair Lakes involves the filling of a 2.5 acre pond with cleared trees and other debris. The filling of the pond is part of an on-going program to reduce bird air strike hazards in the vicinity of the Blair Lakes complex.

4.1.2.2 No Action Alternative

No additional impacts to surface or groundwater would occur. Work that was proposed as part of the 1999 Blair Lakes Range improvements would still be

completed, as well as, all work proposed in the original 1993 25-Year Plan. A detailed discussion of impacts to water resources resulting from work associated with the 25-Year Plan can be found in Section 4.0, pages 8-10 of the *Blair Lakes Range EA.*

4.2 Biological Resources

4.2.1 Vegetation

4.2.1.1 Proposed Action

Placement of fill for road and pad construction would eliminate approximately 4.2 acres of previously undisturbed wetland vegetation. In addition, 22.6 acres of low value black spruce wetlands would be impacted by the mechanized clearing for the utility lines and the helicopter pad.

4.2.1.2 No Action Alternative

The no action alternative would result in no additional work being done at Blair Lakes and, therefore, no additional impacts to vegetation would occur. All work proposed in the 1993 25-Year Plan would still be implemented, as would modifications that were addressed in the 1999 *Blair Lakes Improvement EA*.

4.2.2 Wildlife

4.2.2.1 Proposed Action

4.2.2.1.1 Wildlife habitat in the vicinity of the range has, to a large extent, been enhanced by Blair Lakes activities. This is due to the hydro-axing and mowing of vegetation that is done to maintain target visibility. Mowed and hydro-axed vegetation provides preferred browse for moose, as well as, feeding habitat for snowshoe hare and fox. Due to the abundance of habitat in the area, the small portion that has been filled by construction of facilities has not caused a population level impact, merely a displacement to adjacent habitat. The activities associated with the proposed action would likely have similar displacing impacts to wildlife.

4.2.2.1.2 There has been localized impacts to wetlands resulting in some loss of bird and waterfowl nesting and brood-rearing habitat. Gravel extraction has resulted in some larger open water areas, but due to the pit's steep shoreline configuration, only limited waterfowl resting use has occurred. This is done by design to discourage bird and waterfowl use of the area due to the concern over bird aircraft safety hazards from flying birds.

4.2.2.2 No Action Alternative

Although no additional impacts to wildlife resources would result from the no action alternative, work authorized in 1994 and 1999 as part of the 25-Year Plan and subsequent revisions, would still be completed. Most of this work would have an overall beneficial effect on wildlife resources as it would reduce future impacts and restore disrupted hydrology that has resulted over the years from operation of Blair Lakes Bombing Range.

4.2.3 Fishery Resources

4.2.3.1 Proposed Action

The only identified fish stream in the immediate facility area is an unnamed tributary of Clear Creek. The ADF&G has catalogued this stream as having a resident grayling population; however, observations by range personnel indicate no fish have been caught in the stream. Eielson AFB has constructed one bridge crossing of the Clear Creek tributary, and a second one is planned. In the past, prior to the implementation of the 25-Year Plan, impacts to fishery resources resulted from vehicle traffic doing low water crossings of this tributary. Since the road and stream upgrades have been undertaken, impacts to fish streams have been avoided. The activities proposed, as part of this alternative, would not directly impact existing fishery resources. All road construction would incorporate culverts to ensure that existing natural drainage is maintained.

4.2.3.2 No Action Alternative

No impacts to fishery resources would result from this alternative.

4.2.4 Endangered Species

None of the alternatives considered in this EA will have an impact on any listed Endangered Species that might occur in the area.

4.3 Cultural Resources

Impacts on identified cultural resources in the Blair Lakes Range have, to date, not occurred. Due to the remoteness of these sites, public activities have also not resulted in any alteration of these resources. Future activities, as proposed in any of the alternatives presented in this EA, would also not likely impact these resources as the sites are well documented and are being managed under the auspices of the U.S. Army's Historic Preservation Plan. In the event a cultural resource was found during construction or routine range operations, activities that might impact the resource would cease until a professional archeologist was brought in to evaluate the find.

4.4 Recreational Resources

All lands encompassed by the Exclusive Use Area are inaccessible to nonmilitary activities. When the Blair Lakes Range was first proposed and constructed, public concern was raised by outdoor recreation organizations that some high quality recreational areas would be off limits to public use, this has not proven to be the case. The no-trespass area of Blair Lakes (33,964 acres) is a very small portion of the Tanana Flats region and does not contain high quality fishing and hunting lands. There are reported to be good populations of moose in the area, but this is more because of the Air Force presence on the range than through natural values. The 3,000-acre area which the Air Force hydro-axes provides superior quality browse to animals in the vicinity; however, if this area were not maintained in this condition, the habitat would not be any higher quality than adjacent tracts for which access has not been impacted. None of the alternatives considered in this EA would have an impact on recreation that has not already occurred through the original land withdrawal of the bombing range.

4.5 Subsistence

As discussed in Section 3.5, the area encompassed by the Blair Lakes Range was in an area that was potentially utilized by two bands of Indians, the Chena and the Salcha. The Salcha group no longer exists as a discreet band and the Chena group only used the area on an occasional basis. Since subsistence activities such as hunting, fishing, berry picking, or farming are prohibited within the Blair Lakes Range, there may have been some loss of traditional use of the area, albeit minimal.

4.6 Air Quality

All alternatives that are considered in this EA would have minor and very localized air quality impacts during construction due to fugitive dust and machinery exhaust. During the time that Eielson AFB aircraft are using the training facility, temporary impacts from aircraft jet emissions also occurs.

4.7 Unavoidable Adverse Effects

The unavoidable adverse impacts for the proposed action would include loss of wetlands and vegetative communities resulting from placement of gravel fill, construction of facilities; and potentially an occasional small (temporary) release of fuel or other contaminants from normal construction and operational activities. None of these impacts are individually or cumulatively significant, and most of them are of a temporary nature. The proposed action would have unavoidable impacts associated with construction of the pad and road. The no action alternative would have no additional unavoidable adverse impacts.

4.8 Irreversible and Irretrievable Commitments of Resources

There are very few aspects of either the Proposed Action that would be considered irreversible or irretrievable. The obvious ones, however, are those related to the extraction of gravel and its use as material for construction of the road and pads. The mining of the gravel is an irreplaceable resource once it has been removed. It would, to a degree, be retrievable upon closure of the facility. The vegetation lost or altered by the removal of gravel and its placement in wetlands would be an irreversible commitment of wetlands. Man has developed a limited ability to restore wetlands by removing fill and reestablishing wetlands vegetation and hydrology, but it would likely not be considered justified for these areas due to the low-value and limited uniqueness attributed to these kinds of wetlands (black spruce, scrub/shrub).

4.9 Relationship of Short-Term Uses and Long-Term Productivity

The short-term use of the improvements of Blair Lakes is important to the efficient operation of the bombing range. The range itself, is a critical training facility for Air Force aircraft and important to the mission of Eielson AFB. When weighed against the long-term productivity of the area impacted by the facility's operation, maintenance of its current status seems reasonable. This is mainly due to the fact that the habitat quality of the area encompassed by Blair Lakes is relatively low. It is almost exclusively comprised of black spruce, scrub/shrub wetlands, which is representative of the single most prevalent habitat type found in Interior Alaska.

4.10 Cumulative Impacts

The National Environmental Policy Act process requires that the issue of cumulative impacts be addressed in an environmental assessment.

4.10.1 The Council on Environmental Quality has stated in their NEPA regulations (1508.7) that: "Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions…" and "…can result from individually minor, but collectively significant actions taking place over a period of time." Eielson AFB has, over the years been very cognizant of the issue of cumulative impacts to wetlands. This is due to the fact that the base was, to a large extent, built by filling wetlands, and that expansion of Eielson AFB facilities beyond the original footprint of the base often requires the use of additional wetlands. Of the remaining undeveloped acres that constitute Eielson AFB base lands, 79 percent are designated wetlands.

4.10.2 On a regional basis, Air Force impacts to the environment in the Ft. Wainwright Military Training Area (MTA) are quite localized and are not cumulatively significant. The maintenance of the Blair Lakes Range and its

associated access roads are typical of the kind of activities that the Air Force conducts as part of their military exercises. Relative to the total acreage that comprises the MTA (642,215 acres), the total number of acres that have been even minimally impacted by the Air Force for range related activities, is insignificant (estimated acreage = 440 acres). Most of this acreage will, once Air Force activities are discontinued, revert back to a relatively natural condition. This will be achieved through a combination of active rehabilitation and natural revegetation of a given facility/site.

4.11 Environmental Justice

4.11.1 Executive Order 12898, *Environmental Justice in Minority Populations and Low-Income Populations*, was issued by President Clinton on February 11, 1994. Objectives of the EO, as it pertains to the NEPA process, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. To accomplish these requirements, the Air Force must conduct an environmental justice analysis of all potential impacts that may result from the proposed actions.

4.11.2 The environmental justice analysis must first identify all adverse impacts associated with the project. The next phase is to delineate the potential area of impact for the resources affected. If, within this area of impact, population demographics are such that a disproportionate effect on minority or low-income populations may occur, it should be so identified. These impacts should be documented and mitigation should be developed that can be implemented by the Air Force.

4.11.3 The Air Force's Land Use Permit from the U.S. Army provides them exclusive use of a 33,963 acre portion of the tract, designated R-2211, and joint use with the U.S. Army of the remaining 29,137 acres for a total tract size of 63,100 acres. Blair Lakes is centrally located in this tract. As stated previously, the entire tract is restricted from nonmilitary use and the closest population/residences to this area is along the Tanana River, 15.2 miles east. This residential area does not exhibit characteristics of low-income or minority populations that are not exhibited in the Fairbanks population as a whole.

4.11.4 Based on the environmental impacts identified in this EA and on a corresponding environmental justice analysis, it is felt that no disproportionate impact to minority or low-income populations would occur from implementation of this project.

4.12 Mitigation

No mitigation was recommended or required by any state or federal agencies for any aspect of the proposed work.

5.0 Glossary

Borrow Pit – A specific location where gravel or other fill is removed for use at another site.

Detritus – Loose organic material that results from disintegration of parent material.

Erosion – The wearing away of soil or organic matter by flowing water.

Hydro-axe – A large tracked or wheeled machine with a heavy-duty mower attachment capable of removing standing trees and shrubs.

Inert – A projectile with similar ballistics, but not containing the same explosive charge as its live counterpart. Inert bombs may still have an explosive smoke spotting charge.

Mitigate – To reduce or negate the effects of an environmental disturbance.

Ordnance – Military supplies including weapons, ammunition, combat vehicles, and maintenance tools and equipment.

Permafrost – Permanently frozen subsoil.

Physiographic – A region containing the same general natural characteristics.

Ponding – Depressions resulting from the settling or removal of soil which fill with water from the surrounding saturated soils.

Subsidence – The shrinking of soils when they thaw, often results in ponding.

Succession – Change in the composition of an ecosystem as the available competing organisms, especially plants, respond to and modify the environment.

Target Array – Plastic, wood, or metal representations of enemy forces, personnel, facilities, or equipment in a specific situation, accompanied by target analysis sensors.

Thermokarst – Lakes, bogs, caverns, pits, or other usually water-filled depressions found in permafrost regions resulting from the melting of ground ice.

Tundra – Low-growing vegetation that exist beyond the temperature limitations of tree growth, either because of high latitudes or high altitudes.

Unexploded Ordnance – Live ordnance that did not explode on impact, or practice ordnance in which the smoke spotting charge did not explode on impact.

Wetlands – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation typically adapted for life in saturated soil conditions.

6.0 List of Preparers, Persons, and Agencies Consulted

6.1 Preparer

Sarah Conn, Alaska Caledonia-Environmental Services, Ester, AK,
ph: 907-474-8234.

6.2 Persons and Agencies Consulted

Mr. James Nolke, 354th Civil Engineer Squadron, 354 CES/CEVP, Eielson AFB, ph: 907-377-3365.

Mr. Brent Koenen, 354th Civil Engineer Squadron, 354 CES/CEVN, Eielson AFB, ph: 907-377-5182

Mr. Forrest McDaniel, U.S. Army Corps of Engineers, Regulatory Functions Branch, Fairbanks, AK, ph: 907-474-2166

7.0 Wetlands Permit

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ALASKA
3437 AIRPORT WAY
SUITE 206 WASHINGTON PLAZA
FAIRBANKS, ALASKA 99709-4777

REPLY TO ATTENTION OF:

February 17, 2006

Regulatory Branch
POA-1993-496-T

Mr. Brent Koenen
354 CES/CEVN
2310 Central Avenue, Suite 100
Eielson Air Force Base, Alaska 99702-2299

Dear Mr. Koenen:

Enclosed is the signed Department of the Army (DA) permit modification, file number POA-1993-496-T, Clear Creek. Also enclosed is a Notice of Authorization that should be posted in a prominent location near the authorized work.

If changes to the plans or location of the work are necessary for any reason, plans must be submitted to us immediately. Federal law requires approval of any changes before construction begins.

Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Also enclosed is a Notification of Administrative Appeals Options and Process and Request for Appeal form regarding this DA Permit Modification (see section labeled "Initial Proffered Permit").

You may contact me at (907) 474 2166, by mail at the letterhead address, or by email at Benjamin.N.Soiseth@poa02.usace.army.mil, if you have questions. For additional information about our Regulatory Program, visit our web site at www.poa.usace.army.mil/reg.

Sincerely,

Benjamin Soiseth
Regulatory Specialist

Enclosures

cc. Mr. David Martinson, Base Civil Engineer, 2310 Central Suite 100, Eielson Air Force Base, Alaska 99702-2299

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ALASKA
3437 AIRPORT WAY
SUITE 206 WASHINGTON PLAZA
FAIRBANKS, ALASKA 99709-4777

REPLY TO ATTENTION OF:

February 17, 2006

Regulatory Branch
POA-1993-496-T

DEPARTMENT OF THE ARMY
PERMIT MODIFICATION

Department of the Army permit number P-19930496, Clear Creek, was issued to United States Air Force, Eielson Air Force Base on April 13, 2001, to:

"place approximately 589,699 cubic yards of fill material through the removal of vegetative debris and leveling of 548 acres of waters of the United States, including wetlands; temporarily store approximately 221,027 cubic yards of vegetative debris until disposal of all vegetative debris in an old borrow pit on site previously authorized under DA permit POA-1991-478-4, Willow Creek; and place approximately 8,219 cubic yards of clean soil fill into approximately 9.3 acres of waters of the United States, including wetlands, to construct two lead in lights maintenance roads (900' long x 35' wide x 4' high), each with a turnaround (66' circular base x 4' high). To facilitate construction of the roads, the creation of four temporary turnarounds was authorized (28' long x 28' wide x 4' high). Additionally, in the event of a fuel spill, up to 200 cubic yards of petroleum contaminated soil over the previously authorized clean soil fill on the existing airstrip (airstrip was authorized under POA-1993-496-4, Clear Creek, and is 3500' long x 120' wide x 4' high) may be spread, provided that both the U.S. Army and State of Alaska Department of Environmental Conservation give approval for this disposal method prior to the placement of any contaminated fill."

On November 14, 2002 the permit (Q-1993-0496) was modified to add:

"place approximately 2,820 cubic yards of fill material into approximately 0.60 acres of wetlands to construct a new haul road (705'l x 35'w)."

On July 20, 2004 the permit (POA-1993-496-R) was modified to add:

"place approximately 18,827 cubic yards of fill material into approximately 3.9 acres of wetlands for the construction of a 120' x 350' High Angle Strafe Target pad and a 100' x 30' access road to the target; a 200' x 500' Mobile Strafe Target, a maintenance road, ricochet pits, and a 100' x 30' access road to the target. Temporarily stockpile an unspecified quantity of excavated fill material into 11.9 acres of wetlands (12,794' X 40') excavated for construction of a utility line, to be removed and used as backfill in the utility trench upon completion of the installation of utilities."

On June 17, 2005, the permit (POA-1993-496-S) was modified to add:

"placement of approximately 1,498 cubic yards of additional fill material into approximately .4 acres of wetlands for the construction of a 75' x 80' small aircraft parking area, and the widening of an existing 1190' long access road from 32' to 38' at the base."

The permit (POA-1993-496-T) is hereby modified as follows:

Place approximately 2,370 cubic yards of sand fill into approximately 0.4 acres of wetlands to expand an existing retaining wall and ricochet pit an additional 32 feet, placement of approximately 3,743 cubic yards of gravel fill into approximately 1.3 acres of wetlands for the construction of a 52' x 52' transformer pad, expansion of an existing aircraft turnaround pad from 80' x 75' to 150' x 100', the construction of 675' x 51.5' of road and a 132' x 132' Heli-pad. The mechanized land clearing of a 10 acre safety zone around the Heli-pad and 12.6 acres for a Utility right-of-way. And the placement of approximately 78,578 cubic yards of cleared vegetation and gravel fill into a 2.5 acre pond/gravel pit. All work will be in accordance with attached plans, sheets 1-8, dated 01/23/2006.

The project is located within sections 13, 14, 15, 23, 24, 25 and 26, T. 6 S., R. 1 W., Fairbanks Meridian; Latitude 64.381° N., Longitude -147.683° W.; Blair Lake Air Force Range near Fairbanks, Alaska.

The time limit for completing the work authorized ends on February 28, 2009. If the activity authorized herein is not completed by the above date, this permit modification, if not previously revoked or specifically extended, shall automatically expire. If you find that you need more time to complete the authorized activity, please submit your request for a time extension to the Corps of Engineers for consideration at least one month before permit expiration.

All other conditions under which the subject authorization was made remain in full force and effect.

This authorization and the enclosed modified plans should be attached to the original permit. Also enclosed is a Notice of Authorization that should be posted in a prominent location near the authorized work.

BY AUTHORITY OF THE SECRETARY OF THE ARMY

Christy Everett
Manager, Fairbanks Field Office

Enclosures

cc. Mr. David Martinson, Base Civil Engineer, 2310 Central Suite 100, Eielson Air Force Base, Alaska 99702-2299

8.0 Public Notice

USAF ANNOUNCES
an
ENVIRONMENTAL ASSESSMENT

In accordance with the National Environmental Policy Act (NEPA), and Air Force Regulations, Eielson Air Force Base has completed an environmental assessment (EA) and Finding Of No Significant Impact (FONSI) to evaluate the consequences of the following stated proposed action:

Expand existing ricochet pit wall , construct a new electrical transformer pad, enlarge an existing aircraft turnaround pad, construct a new helicopter pad, install additional utility lines, and mechanically clear 22.6 acres of wetlands.

PUBLIC COMMENT WELCOME

To review the draft EA and FONSI, copies are available at the Noel Wien Library in Fairbanks. The public is invited to review these documents and make comments during the 30-day comment period from now until April 18, 2006. To get a copy of the EA, to comment, or for more information contact Jim Nolke, Eielson AFB Environmental Flight, at (907) 377-3365, or by mail at 354 CES/CEVP, 2310 Central Ave, Ste 100, Eielson AFB, AK 99702-2299.

This public notice appeared in the Fairbanks Daily News on March 15, 2006.